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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,799	04/30/2001	Hugh E. McLoone	03797.00046	1068
28319	7590	05/25/2004	EXAMINER CHAU, MINH H	
BANNER & WITCOFF LTD., ATTORNEYS FOR MICROSOFT 1001 G STREET, N.W. ELEVENTH STREET WASHINGTON, DC 20001-4597			ART UNIT 2854	PAPER NUMBER

DATE MAILED: 05/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/843,799	Applicant(s) MCLOONE ET AL.	
	Examiner Minh H Chau	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 42,46 and 50-65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 42,46 and 50-65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. The indicated allowability subject matter in **claims 42 and 46** are withdrawn in view of the newly discovered reference(s) to Chen (US Pub. No. 2002/014097A1). The following rejections based on the newly cited reference(s).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 42, 46, 50, 53, 55-58, 61 and 63-65** are rejected under 35 U.S.C. 102(e) as being anticipated by Chen (US Pub. No. 2002/014097A1).

With respect to claim 42, Chen teaches a keyboard (1) comprising an alphanumeric section, a plurality of keys located behind the alphanumeric section (see Figs. 7-8), the plurality of keys each functioning as predetermined command keys in a first mode and standard function keys in a second mode, a switch key or a function lock selector (3), the function lock selector (3) being actuable to change the functionality of the plurality of keys between the first and second modes and maintain the selected mode until a subsequent actuation of the function lock selector (3) is performed and the three keys of the plurality of keys are from the set of spell, save and print keys when operated in the first mode (see Figs. 7-8 and paragraph [0032-0033]).

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With respect to claim 46, Chen teaches a keyboard (1) comprising an alphanumeric section, a plurality of keys located behind the alphanumeric section (see Figs. 7-8), the plurality of keys each functioning as predetermined command keys in a first mode and standard function keys in a second mode, a switch key or a function lock selector (3), the function lock selector (3) being actuable to change the functionality of the plurality of keys between the first and second modes and maintain the selected mode until a subsequent actuation of the function lock selector (3) is performed, an editing section, the editing section being laterally disposed from the alphanumeric section and the a key cluster located behind and spaced from the editing section, the key cluster consisting of an Undo key and Redo key (see Figs. 7-8 and paragraph [0032-0033]).

With respect to claims 50 and 58, see Figs. 7-8 of Chen that shows the keys of the plurality of keys are arranged in a row, the row being spaced from the alphanumeric section.

With respect to claims 53 and 61, see Figs. 7-8 of Chen that shows three keys of the plurality of keys each has an upper surface and a front side surface, the upper surface of each of key is labeled with its respective predetermined command as operated in the first mode.

With respect to claims 55 and 63, see Figs. 7-8 of Chen that shows the function lock selector (3) includes key lock or a Function Lock key.

With respect to claims 56 and 64, see Figs. 7-8 and paragraph [0034] of Chen that teaches a function lock indicator that indicates whether the keys are operating in the first mode or in the second mode.

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With respect to claims 57 and 65, see Figs. 7-8 and paragraph [0034] of Chen that teaches a function lock indicator includes a light emitting element or member.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 51-52 and 59-60** are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen as applied to claims 42, 46, 50, 53, 55-58, 61 and 63-65 above, and in view of Liuzzo et al. (US # 4,698,618).

With respect to claims 51 and 59, Chen teaches all the limitation as explained above except for the row includes first, second and a third key clusters each consisting of exactly three keys.

Liuzzo et al. teaches a keyboard comprising a row of keys includes first, second and third key clusters each consisting of exactly three keys (see the Figure and col. 7, lines 45-61 of Liuzzo et al.)

In view of this teaching, it would have been obvious to one of ordinary skill in the art to modify the device of Chen to include the row of keys includes first, second and third key clusters each consisting of exactly three keys as taught by Liuzzo et al. for the advantage of allowing the user to easy operates a specific functions of each of these key cluster.

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With respect to claims 52 and 60, the combined product of Chen and Liuzzo et al. teach all the limitation as explained above, except for the limitation of "fourth key cluster consists of exactly three keys".

The combined device of Chen and Liuzzo et al. teach the keyboard include a first, second and third key clusters each consisting of exactly three keys as explained above.

In view of the above teaching, it would have been obvious to one of skill in the art to modify the device of Chen and Liuzzo et al. to include the fourth key cluster that consists of three keys for the advantage of allowing more command function can be available for the user. It is also noted that a broad recitation of a plurality of a known feature is an obvious expedient.

6. Claims 54 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen as applied to claims 42, 46, 50, 53, 55-58, 61 and 63-65 above, and in view of Fukunaga (JP 05-019933).

With respect to claims 54 and 62, Chen teaches all the limitation as explained above except for the limitation of "front side surface of each said key is labeled with its standard function key label as operated in said second mode"

Fukunaga teaches a keyboard including a plurality of keys with a front side surface being labeled with a function command for operating in second mode (see Fig. 2 of Fukunaga).

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In view of this teaching, it would have been obvious to one of skill in the art to modify the device of Chen to include keys that have the front side surface being labeled with a function command for operating in a second mode as taught by Fukunaga to allow the user to easily operate the switching between the first and second mode of each key.

The combined device of Chen and Fukunaga teach all the limitation except for the front side surface of each key is labeled with its standard function key label.

The combined product of Chen and Fukunaga teach a plurality of keys the have upper surface and front side surface being labeled with a predetermined command function and standard function as explained above.

In view of this teaching, it would have been obvious to one of skill in the art to modify the device of Chen and Fukunaga to include the front side of each key is labeled with its standard function key label as operated in second mode to allow the frequently used command function labeled on the upper surface of the key is more noticeably or more prominently than the standard function so that the user can easily access the predetermined command function.

Response to Remarks

7. Applicant's remarks filed March 16, 2004 have been fully considered. However, the indicated allowability subject matter of claims 42 and 46 are withdrawn in view of the newly discovered reference(s) to Chen as explained in the rejection above.

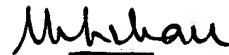
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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh H Chau whose telephone number is (571) 272-2156. The examiner can normally be reached on M - TH 9:30AM - 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MHC
May 20, 2004



Minh Chau
Patent Examiner